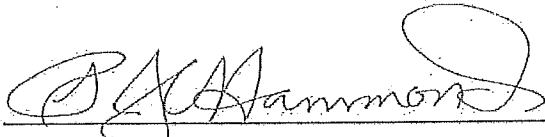




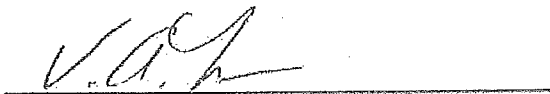
Washington State
Department of Transportation

November 2, 2009

Surety Bond Risk Assessment Guidelines


Approved - Secretary of Transportation

11.2.09
Date


Approved - Office of Financial Management

11-5-09
Date

I. Introduction

A. Surety Bonds Background

Prior to the 2009 Legislative Session, RCW 39.08.030 required the contractor on all Washington State Department of Transportation (the "Department") bridge/road contracts to secure a performance and payment bond for an amount equal to the full contract price. Performance and payment bonds for large highway construction contracts, generally over \$500 million, are becoming difficult or impossible to obtain because the surety industry is unable to issue bonds over this amount. The Department is planning several mega-contracts that will exceed this threshold.

In addition, prior to the 2009 Legislative Session, Washington State's statutory framework addressed the bonding process through a single contract bond that covers both performance and payment risk. By combining both performance and payment coverage under one bond, the penal sum of the bond applies to both performance and payment claims. On mega-contracts, this combined bond could limit the Department's ability to maximize coverage if the practical available limit for the penal sum of the bond is less than the full contract price.

B. Changes in Legislation

To address the lack of available bonding for mega-projects, the Department requested discretion to set the amount of the performance and payment bond at something less than the full contract price for contracts over \$250 million, and to require a performance bond separate from the payment bond. In the 2009 session, the Legislature approved the use of separate performance and payment bonds at less than the full contract

price. See 5499-S.SL [RCW 39.08.030(3)]. The Legislature conditioned the use of such reduced bonds as follows:

1. The Department may authorize bonds in an amount less than the full contract price only on projects with an estimated contract price of \$250 million or more.
2. The performance bond must be separate from the payment bond.
3. The amount of the performance bond shall not be less than \$250 million.
4. The amount of the payment bond shall not be less than the performance bond.
5. The Department must develop risk assessment guidelines and gain approval of those guidelines from the Office of Financial Management (OFM). The guidelines must include a clear process for how the Department measures the state's exposure to loss and how the performance bond will adequately protect 100 % of the state's exposure to loss ("maximum exposure to loss").
6. The OFM shall review and approve the analysis supporting the amount of any specific performance and payment bond that the Department seeks to authorize at an amount less than the full contract price.
7. After obtaining OFM approval, the Secretary of Transportation must approve each performance and payment bond authorized for less than the full contract price.

II. Purpose

This document is developed to carry out the requirement of RCW 39.08.030(3)b, wherein the Department must gain approval from OFM for risk assessment guidelines that include a clear process for determining and protecting 100% of the state's exposure to loss.

III. Procedure for Determining Performance Bond Amount

A. General

1. The Department's use of RCW 39.08.030(3)a shall be limited to projects where a contract bond for 100% of the full contract price is not available in the surety market.
2. To determine whether or not a contract bond for 100% of the full contract price is available, the Department will obtain written confirmation from the Surety and Fidelity Association of America regarding the maximum contract bond amount available in the surety market for the particular project. If that available amount exceeds the project's estimated contract price, the Department will

require a 100% contract bond on the project and provisions of RCW 39.08.030(3) will not be implemented.

3. If the maximum amount of a contract bond available in the surety market is determined to be less than the project's estimated contract price, then the Department will implement the process designated in RCW 39.08.03(3)a.

B. Procedure for Determining Performance Bond Amount - Overview

The process consists of the following five steps:

1. Determine the worst-case scenario in terms of type of contract action that results in a default that implicates bond funds. See Section III C.
2. Identify all possible cost items associated with the worst-case scenario identified above. See Section III D.
3. Determine the point in contract time that the sum of the cost items is at its greatest point thereby identifying the Department's maximum exposure to loss. See Section III E.
4. Determine the recommended performance bond amount. See Section III.F.
5. Obtain approval from OFM for the performance bond amount. See Section III.G.

C. Determine the Worst Case Scenario

In a contract default on a public works project covered by a performance bond, one of the following three scenarios is most likely to occur:

1. Continuation – Under surety management, the current contractor is retained and special arrangements are made to ensure their completion of the project.
2. Internal Takeover – Under surety management, the project is finished by the surety -- using its own resources.
3. External Procurement – A new contractor is hired to finish the project.

External Procurement, a situation where the contractor becomes insolvent, vacates the project, and the surety must procure a different contractor to complete the project, will be the most costly scenario and would present the highest risk to the Department. Consequently, External Procurement shall be applied as the worst case scenario.

D. Identify Possible Cost Items

In a default scenario when a contractor indicates that it cannot complete a contract, two major cost considerations face the Department: A) the amount of contract funds programmed to complete all phases of the project; and B) the additional costs that must be incurred to address the

defaulting contractor's departure. The former is a cost that the Department will incur regardless of whether a contractor defaults. The latter establishes the default-related costs, which in turn determines the state's maximum exposure to loss.

There are a number of default-related costs that will apply on a given project. The following list provides some possible examples. The list is not exhaustive and shall be modified as necessary based on the type of project to assure that all default-related costs that apply to a given contract default are addressed.

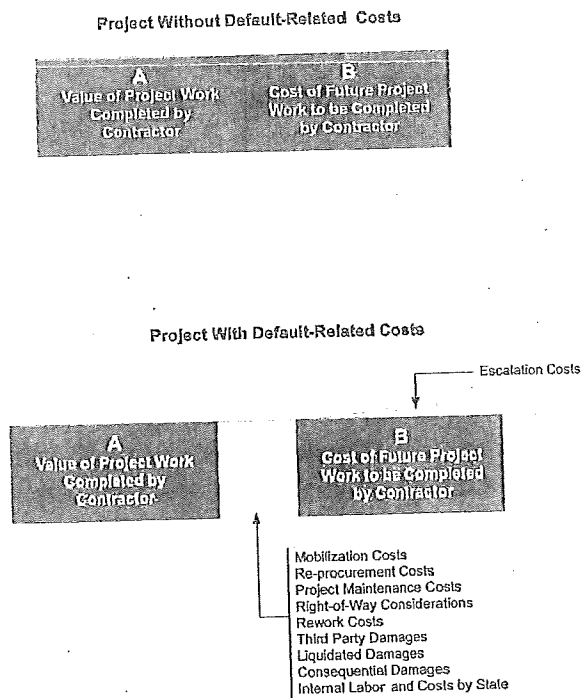
1. Mobilization — an early work item that allows a contractor to offset the upfront costs of assembling crew and equipment on a project site. Mobilization allows the contractor to be in a position to begin to add value to the project, but the act of mobilizing itself does not add residual value.
 - a. *Demobilization* — in the event of default, the contractor's left-behind equipment and temporary facilities may need to be removed from the project site.
 - b. *Re-Mobilization* — in the event of default, a replacement contractor would require a separate mobilization payment.
2. Re-procurement — in the event of a default, a new prime contractor would need to be selected to finish the project.
 - a. *Contract document update* — the construction plans and project specifications would require updating to reflect the changes in site conditions that would result from the initial contractor's work. Updating could include new surveys, design document revisions, modification of the contract's special provisions, and updating of the material estimate.
 - b. *Account for reduced competition* — bidding a contract that includes picking up where another contractor left off will likely appeal to a smaller pool of potential contractors than did the original project concept, resulting in an increased cost to the Department due to decreased competition.
3. Project Maintenance — in the event of a default, site maintenance and maintenance of administrative functions will be required until a replacement contractor can be activated.
 - a. *Administrative maintenance* — staff will be required to oversee the project site and manage the re-procurement process.
 - b. *Worksite maintenance* — in the event of default, it is likely that the project will be in some state of partial construction, including the existence of roadway detours, excavation pits, or other features that will require security oversight and

physical maintenance until a replacement contractor is selected.

4. Right-of-Way Considerations — in some projects, temporary easements will have been secured to allow for project staging work zones, detours, or other project-related activities. These easements will likely have a negotiated term of “rental” that may need to be extended if there are schedule delays associated with a default.
5. Rework — a replacement contractor may need to perform rework on the original contractor’s efforts, particularly in areas associated with temporary improvements, including detours that were designed and constructed to last for a short-term.
6. Third Party Damages — agreements may be in place with stakeholders adjacent to the project, including limited-term access restrictions and detours; these agreements are likely to have an agreed-upon term limit that may need to be extended in the event of a schedule delay associated with a default.
7. Price Escalation Due to Delay — schedule delays associated with a default and subsequent re-procurement will likely result in higher input costs due to price inflation, particularly associated with raw materials (such as cement, steel, and asphalt) and fuel.
8. Liquidated Damages — terms of a construction contract may include provisions that the contractor will be assessed liquidated damages in the event of delay of the project or other actions or inactions.
9. Consequential Damages — to the extent allowed, these are damages that are not a direct result of the default, but are a consequence of the default. Said damages must be a foreseeable result.
10. State Internal Labor Costs — in the case of default, the project owner would likely incur labor costs not directly associated with the project, particularly those of an administrative nature.

These costs impact the overall duration and total cost of the project, as illustrated in figure 1, below.

Figure 1: Identification of Default-Related Costs in Project Lifecycle



The cost categories noted above are calculated either as a percentage of the value of each project stage or as a percentage of the total remaining value of the contract; the exact extent and nature of the costs will vary on a project by project basis.

E. Determine Point in Time when the Sum of the Cost Items is Greatest

The State's exposure to loss varies over the life of a project. A contractor default can potentially occur at any point in time during the project. However, a contractor default most likely would occur either near or at the end of project phases/stages or just after the project has been initiated - when contractor forces have been deployed and the general pace of the project has not been set yet. A detailed analysis is made of points in time with particular high activity concentration or significant transition. These points will identify highest probability of contractor default. Use the following steps.

1. **Identify Work Stages to be Evaluated for Default Cost Analysis** - Assess the size (cost and elapsed time) of the work stages/phases, searching for points of particularly high activity concentration or significant transition. These points will be those of the highest probability of contractor default and highest cost to transfer to a new contractor.
2. **Evaluation Cost Factors** - Evaluate project-appropriate cost factors identified in Section III.D above, including any additional project specific cost factors for each of the high cost work stages.

Use the most up-to-date engineer estimates for completing the work.

3. **Summarize Cost Factors by Work Stage** - The overall cost factors for each cost work stage shall be documented.
4. **Establish the Maximum Exposure to Loss** - The highest sum of cost factors identified in step III.E.3 establishes the state's maximum exposure to loss for the project.

F. Determine Recommended Performance Bond Amount

1. If the state's maximum exposure to loss is less than the largest bond amount available in the surety market, the Department shall set the recommended performance bond amount at the maximum bond amount available in the market. If the Department determines during the bidding process that the recommended bond amount is either not commercially available or excessively restricts competition; the Department may recommend to OFM a performance bond of the greater of the state's maximum exposure to loss or \$250 million.
- 2.. If the state's maximum exposure to loss is greater than the largest bond amount available in the surety market, the Department shall take measures to either reduce the state's exposure to loss, or identify increased bond coverage, so as to ensure that 100% of the state's exposure to loss is adequately protected. In no case shall a performance bond be set at an amount less than the state's maximum exposure to loss or \$250 million dollars, whichever is greater.

G. OFM Review and Approval

Upon establishing the recommended performance bond amount in III.F, the Department will submit a copy of the analysis to OFM for review and approval. The Department shall not establish a performance bond amount without the prior written approval of OFM. OFM may seek an outside consultant to provide an independent evaluation of the Department's analysis. OFM will charge the cost of any consultant to the Department, and the Department will pay this cost as part of the project costs.

IV. Procedure for Determining Payment Bond Amount

The legislation does not allow the payment bond amount to be less than the performance bond amount. Therefore, first determine the amount of the performance bond, and then set the payment bond amount equal to the performance bond amount.

V. Contact for more information

For more information please contact the Headquarters Construction Office at 360-705-7820, Web site <http://www.wsdot.wa.gov/biz/construction/>.

VI. References

RCW 39.08 et. al.
5499-S.SL

Americans with Disabilities Act (ADA) Information

To request this document in large print, Braille, cassette tape, or on computer disk, call (360) 705-7097. Or, dial 7-1-1 (voice 1-800-833-6384) to contact Washington State Telecommunications Relay Service and Tele-Braille, and request connection to (360) 705-7097.